

IN THE DRAWINGS

The attached sheets of drawings include changes to Figs. 23A-23D and Fig. 24.

These sheets, which include Figs. 23A-23D and Fig. 24, replace the original sheets including Figs. 23A-23D and Fig. 24.

Attachment: Replacement Sheets

REMARKS

Favorable reconsideration of this application is respectfully requested.

A new Title believed to be more clearly indicative of the claimed invention is submitted herein.

Further, the specification is amended to correct minor grammatical and idiomatic informalities. The changes made to the specification are deemed to be self-evident from the original disclosure, and thus are not deemed to raise any issues of new matter.

Substitute Figs. 23A-23D and Fig. 24 are submitted herein in which each of those figures is now labeled as "Prior Art".

Claims 1-20 are pending in this application. Claims 9-14, 16, 17, and 20 stand withdrawn from consideration. Claims 1-8, 15, 18, and 19 were rejected under 35 U.S.C. § 112, second paragraph. Claims 1-8, 15, 18, and 19 were rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. patent 6,476,481 to Woodworth et al. (herein "Woodworth") in view of U.S. patent 3,825,876 to Damon et al. (herein "Damon").

Applicant and applicants' representative wish to thank Examiner Williams for the interview granted applicants' representative on January 19, 2005. During the interview the outstanding rejections were discussed in detail. Further, during the interview differences between the present invention and the applied art were discussed, and claim amendments clarifying such differences were also discussed. The present response sets forth those discussed claim amendments. Examiner Williams indicated he would further consider such amendments when fully presented in a filed response.

Addressing now the rejection of claims 1-8, 15, 18, and 19 under 35 U.S.C. § 112, second paragraph, that rejection is traversed by the present response. Independent claim 1 is amended by the present response to clarify the language therein noted as unclear. The claim

amendments are believed to address the above-noted rejection under 35 U.S.C. §112, second paragraph.

Addressing now the rejection of claims 1-8, 15, 18, and 19 under 35 U.S.C. § 103(a) as unpatentable over Woodworth in view of Damon, that rejection is traversed by the present response.

Independent claim 1 is amended by the present response to make a clarification. Specifically, claim 1 now clarifies that the gap is maintained between the semiconductor device and the external electric member to be constant “by inserting at least some of the third lead portions into said external electric member up to said gap controlling leads”.

According to the claimed features, and as shown in Fig. 2B and Fig. 3 as a non-limiting example, a gap-controlling lead 9 is provided onto a lead such that a third lead portion 23 is inserted into an external electric member up to the gap controlling lead 9. That is, the claimed structure utilizes gap controlling leads 9 to maintain a gap between a semiconductor device and an external member to be constant. Such a structure is believed to clearly distinguish over the applied art.

The outstanding rejections cites Woodworth to show leads 25, 26, and 27 including the claimed first, second, and third lead portions. However, applicants respectfully submit the structure and operation of those leads 25-27 in Woodworth differ from the claimed features. More particularly, the notched structure 30 in the leads 25, 26, and 27 in Woodworth does not play any role in maintaining a gap between a semiconductor device and an external member to be constant. Woodworth expressly notes:

In accordance with an important feature of the invention, conductors 25 and 27 are bent away from the center of lead 26 and the package 20 at areas adjacent the front surface 28 by reentrantly shaped bends 30 and 31 respectively. This *causes added creepage distances 32 and 33 along surface 28*

*to permit the use of higher voltages between leads 25 and 27, and center lead 26.*¹

Thus, the bends 30 and 31 in leads 25 and 27 in Woodworth are provided merely to increase a distance between leads 25 and 27. Those bends 30 and 31 in Woodworth have no relevance to and play no role in maintaining a gap between a semiconductor device and an external member to be constant.

Further, as clearly shown for example in Figure 4 in Woodworth, the leads 25-27 are not inserted into a frame 35 up to the noted gap controlling leads. In the claims, the leads include at least some third lead portions inserted into an external electric member up to a gap controlling portion. That is clearly not the case in Woodworth, as shown for example in Figure 4 in Woodworth.

Moreover, by utilizing the shapes and structures of the leads in the claimed invention, the solderability of the leads is enhanced when lead-free solders are used. In particular, such an advantage is apparent from the experimental results described in the present specification in Table 1, on page 40, and in Figure 21. None of the applied art even addresses achieving such benefits.

In such ways, Woodworth does not meet the limitations relied upon in the basis for the outstanding rejection.

Further, no teachings in Damon are believed to overcome the above-noted deficiencies in Woodworth.

In view of these foregoing comments, applicants respectfully submit amended independent claim 1, and the claims dependent therefrom, patentably distinguish over the applied combination of teachings of Woodworth in view of Damon.

Applicants also note each of claims 9-14, 16, 17, and 20 is a dependent claim that depends from independent claim 1, and thus independent claim 1 is clearly generic to each of

¹ Woodworth at col. 4, lines 29-35 (emphasis added).

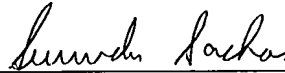
those claims. As independent claim 1 is allowable for the reasons discussed above, each of withdrawn claims 9-14, 16, 17, and 20 must now be reinstated.

Thereby, in view of the present response, allowance to each of claims 1-20 is believed to be proper.

As no other issues are pending in this application, it is respectfully submitted that the present application is now in condition for allowance, and it is hereby respectfully requested that this case be passed to issue.

Respectfully submitted,

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